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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Joel Naumann

73081

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76863

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02/24/2009

KRAGULJAC & KALNAY
4700 ROCKSIDE ROAD
SUMMIT ONE, SUITE 510
INDEPENDENCE, OH 44131

EXAMINER

PHAN, TRI H

ART UNIT

PAPER NUMBER

2416

MAIL DATE

DELIVERY MODE

02/24/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/612,067	Applicant(s) NAUMANN, JOEL	
	Examiner TRI H. PHAN	Art Unit 2416	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 January 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,5-10,13-18 and 20-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 5-10, 13-18 and 20-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Communication(s)

1. This office action is in response to the RCE filed on January 8th, 2009. Claims 2-4, 11-12 and 19 are now cancelled. Claims 1, 5-10, 13-18 and 20-24 are now pending in the application.

Claim Objections

2. Claims 1, 5-6, 8, 10, 13, 18, 20 and 23 is objected to because of the following informality:

Applicant is respectfully suggested to be spell out the abbreviations of “PCI, FE, IDSEL” in claims 1, 10 and 18; “MII” in claims 5, 13 and 20; “HDLC” in claim 6; “SAR” in claim 8 and 23.

In claim 13, line 1, “from card” is a typographical error; it should be correct to -- front card --.

Appropriate corrections are required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 5-10, 13-18 and 20-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant’s admitted prior art (AAPA) in view of **Bachrach, Yuval** (U.S.6,694,394; hereinafter refer as ‘**Bachrach**’).

- In regard to claims 1, 10 and 18, **AAPA** discloses, in the background section of the specification, pages 1-6 and in figures 1-2, a system, means and method comprises receiving by the input of circuit 105, provided on a PCI-compliant front card comprising an FE MAC in a router, a sensing signal ('IDSEL signal') from a back card comprising an FE Phy in the router, where the circuit 105 is serially disposed on a IDSEL line 106 corresponding to a particular channel, and wherein the IDSEL input is driven high in combination of Command/byte enable signals 'C/BE' during a config cycle for making active or present of the device, and vice versa. It appears that **AAPA** fails to disclose the "tri-state buffer". However, such limitation lacks thereof from **AAPA** is well known and disclosed by **Bachrach**.

In an analogous art, **Bachrach** discloses the method and interface circuits within the MAC and PHY allow for the MAC to detect if a PHY is present or connected (for example see figs. 9 and 11; Abstract); wherein PHY device(s) is detecting for present or not, e.g. connect/not connect, by determining the high/low state of the input buffer's output 1012 in MAC, e.g. "tri-state buffer", via the control of the Finite State Machine 'FSM' and pullup 1006/pulldown 1008 circuits as disclosed in figs. 10-11; col. 6, lines 4-43; col. 7, lines 57-67.

Thus, it would have been obvious to those skilled in the art at the time of the invention was made to implement the interface circuits as taught in **Bachrach**'s system in place of **AAPA**'s system for the purpose of allowing detection of devices to a port. The motivation being small and flexible enough in connecting PHY devices from different manufactures as specified in col. 1, lines 32-38.

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- Regarding claims 5, 13 and 20, **AAPA** further discloses, wherein said front card and said back card are coupled via an MII bus (for example see **AAPA**: figs. 1-2).

- In regard to claims 6, 14 and 21, the combination of **AAPA** and **Bachrach** further fails to explicitly disclose for the “*HDLC control*” in the front card, and “*T1/E1 framer/line interface*” in the back card. However, HDLC control is well known in the art for controlling data using TDM protocol; and T1/E1 framer/line interface is well known interface in the art for communicating data via TDM protocol.

Thus, it would have been obvious to person with ordinary skill in the art, to include the *HDLC control* and *T1/E1 framer/line interface* in the front and back card of the **AAPA** and **Bachrach**’s system, with the motivation being to implement different types of network and requirements needed for applying under different protocol such as TDM, as matter of design choices.

- Regarding claims 7, 15 and 22, the combination of **AAPA** and **Bachrach** does disclose method and circuits for using Fast Ethernet protocol with MII bus (for example see **AAPA**: figs. 1-2); but fails to explicitly disclose for the “*TDM*” bus. However, TDM bus is well known in the art for transporting data using TDM protocol.

Thus, it would have been obvious to person with ordinary skill in the art, to include the *TDM* bus in the **AAPA** and **Bachrach**’s bus system, with the motivation being to provide different buses for transporting data on different types of network and requirements needed for applying under different protocols such as TDM, as matter of design choices.

- In regard to claims 8, 16 and 23, the combination of **AAPA** and **Bachrach** further fails to explicitly disclose for the “*ATM SAR*” in the front card, and “*ATM Phy*” in the back card. However, ATM SAR is well known in the art for segmenting/assembling data using ATM protocol; and ATM Phy is well known interface in the art for interfacing data via ATM protocol.

Thus, it would have been obvious to person with ordinary skill in the art, to include the *ATM SAR* and *ATM Phy* in the **AAPA** and **Bachrach**’s front and back cards, with the motivation being to implement different types of data network and requirements needed for applying under different protocol such as ATM, as matter of design choices.

- Regarding claims 9, 17 and 24, the combination of **AAPA** and **Bachrach** does disclose method and circuits for using Fast Ethernet protocol with MII bus (for example see **AAPA**: figs. 1-2); but fails to explicitly disclose for the “*Utopia*” bus. However, Utopia is well known bus in the art for transporting data via ATM protocol.

Thus, it would have been obvious to person with ordinary skill in the art, to include the *Utopia* bus in the **AAPA** and **Bachrach**’s bus system, with the motivation being to provide different buses for transporting data on different types of network and requirements needed for applying under different protocol such as ATM, as matter of design choices.

Response to Arguments

5. Applicant's arguments filed on January 8th, 2009 with respect to claims 1, 5-10, 13-18 and 20-24 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tri H. Phan, whose telephone number is (571) 272-3074. The examiner can normally be reached on M-F (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi H. Pham can be reached on (571) 272-3179.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office, whose telephone number is (571) 272-2600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Tri H. Phan/
Primary Examiner, Art Unit 2416

February 23, 2009